

Protecting Endangered Species

Interim Measures for Use of Rodenticides in San Diego County

The federal Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct due to human activities. Under the Act, the U.S. Environmental Protection Agency (U.S. EPA) must ensure that the use of pesticides it registers will not result in harm to the species listed as endangered or threatened by the U.S. Fish and Wildlife Service, or to habitat critical to those species' survival. This program will protect endangered and threatened species from harm due to pesticide use.

The information provided in this bulletin is similar to what U.S. EPA expects to distribute once the Endangered Species Protection Program is in effect. Individuals who use pesticides during this interim period are not legally required to comply with these suggested measures. At the present time, compliance with the requirements specified on the pesticide product labeling will satisfy all legal requirements regarding pesticides and endangered species protection. While these pesticide use conditions do not yet have the force of law, they are being provided now for your use in voluntarily protecting endangered and threatened species.

Your comments are needed regarding the information presented in this publication. Please contact us to let us know whether the information is clear and correct. Also tell us to what extent following the recommended measures would affect your pesticide use program. This information will be considered by U.S. EPA during the final stages of program development.

Please submit comments to:
DPR Pesticide Registration Branch
1020 N Street, Room 332
Sacramento, CA 95814
(916) 324-3881

About This Publication

This publication contains a county map showing the area where pesticide use should be limited to protect listed species. The areas where listed species are present are identified on the map by a shaded pattern. The areas are also described in terms of township, range and section for specific detail.

The Table of Use Limitation Codes lists the species addressed in this bulletin and categorizes them by species group. Species have been placed in logical groups based on their similar characteristics or behaviors.

The Use Limitation Codes table also lists the limitation codes for each of the species groups. The codes indicate the specific limitations that are necessary to protect the species. The table titled Table of Limitations on Pesticide Use explains the codes.

Does This Information Apply To You?

To determine whether this information applies to your use of a pesticide, review the questions below. The information applies only if you answer "yes" to both questions:

- Do you intend to use pesticides within the shaded area on the county maps (pages 4-7)?
- Are any of the ingredients included in your pesticide product named in the "Table of Use Limitation Codes" (page 8)?

If you answer "yes" to both questions, you should follow the instructions on "How to Use This Information" to help protect listed species.

If you answer "no" to either question, you should follow the usage directions on the pesticide product label.



How to Use This Information

- 1 On the maps provided with this bulletin, find the shading pattern that covers the area where you will apply pesticides. If the site is clearly outside of the shaded area, refer to the label for general fish and wildlife protection, this bulletin does not apply. If the site clearly is in the shaded area or you are not sure from the map, please refer to the section list (pages 11-12) for more detailed information.
- 2 If the section where you will apply pesticides is not listed in the section list, then see the label for general fish and wildlife protection, this information does not apply to you. If the section where you will apply pesticides is listed, the species that are likely to be found in the section are listed in the next column.
- 3 In the Table of Use Limitation Codes (page 8), look up the species and note the numbered use limitation code(s) that apply to each section where you will apply pesticides.
- 4 In the Table of Limitations on Pesticide Use (pages 9-10), look up the code number of the use limitation that applies to each section where you will apply pesticides. Follow the limitation(s) that apply to each section where you will apply a pesticide that is subject to the provisions of this bulletin.
- 5 If you are applying more than one listed active ingredient or applying a listed active ingredient in an area with more than one listed species, multiple limitations may apply. If multiple use limitations conflict, you should follow the most restrictive limitation.

Alternatives

The following alternatives should be considered in place of pesticide applications or to reduce the amount and/or frequency of pesticide applications for control of vertebrate pests. Use of these alternatives may result in reduced costs, greater control and less long-term need for pesticide applications.

- Trapping may be very effective for control of vertebrate pests in areas of limited size, especially burrowing rodents such as gophers and ground squirrels. For example, Conibear No. 110-type traps are effective for ground squirrels. To minimize threats to non-target species, traps should be placed only in active burrows. If there is any doubt about burrow activity, the burrow opening should be closed with soil and traps should be placed only in burrows that are re-opened. Stake all traps during placement. To reduce risk to non-target species, spring all traps before nightfall and reset the following morning as needed.
- Shooting, where safe and appropriate, may be effective for limited infestations of day-active species such as ground squirrels.
- Repellents may reduce feeding damage to young trees.
- Habitat modification including vegetation management (e.g. removal of brush piles) may reduce abundance of pest species.

Species Addressed in This Bulletin



Pacific Pocket Mouse

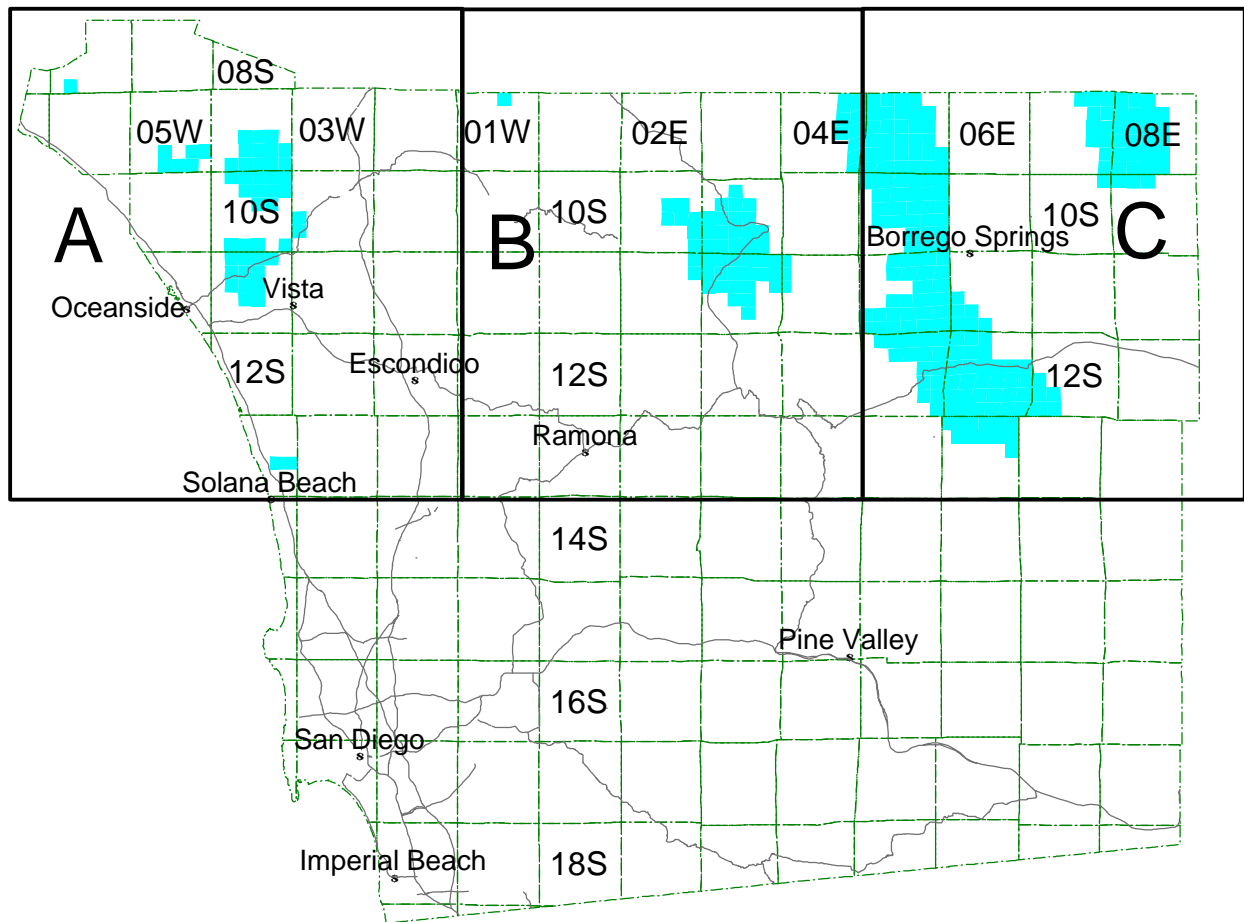


Peninsular Bighorn Sheep



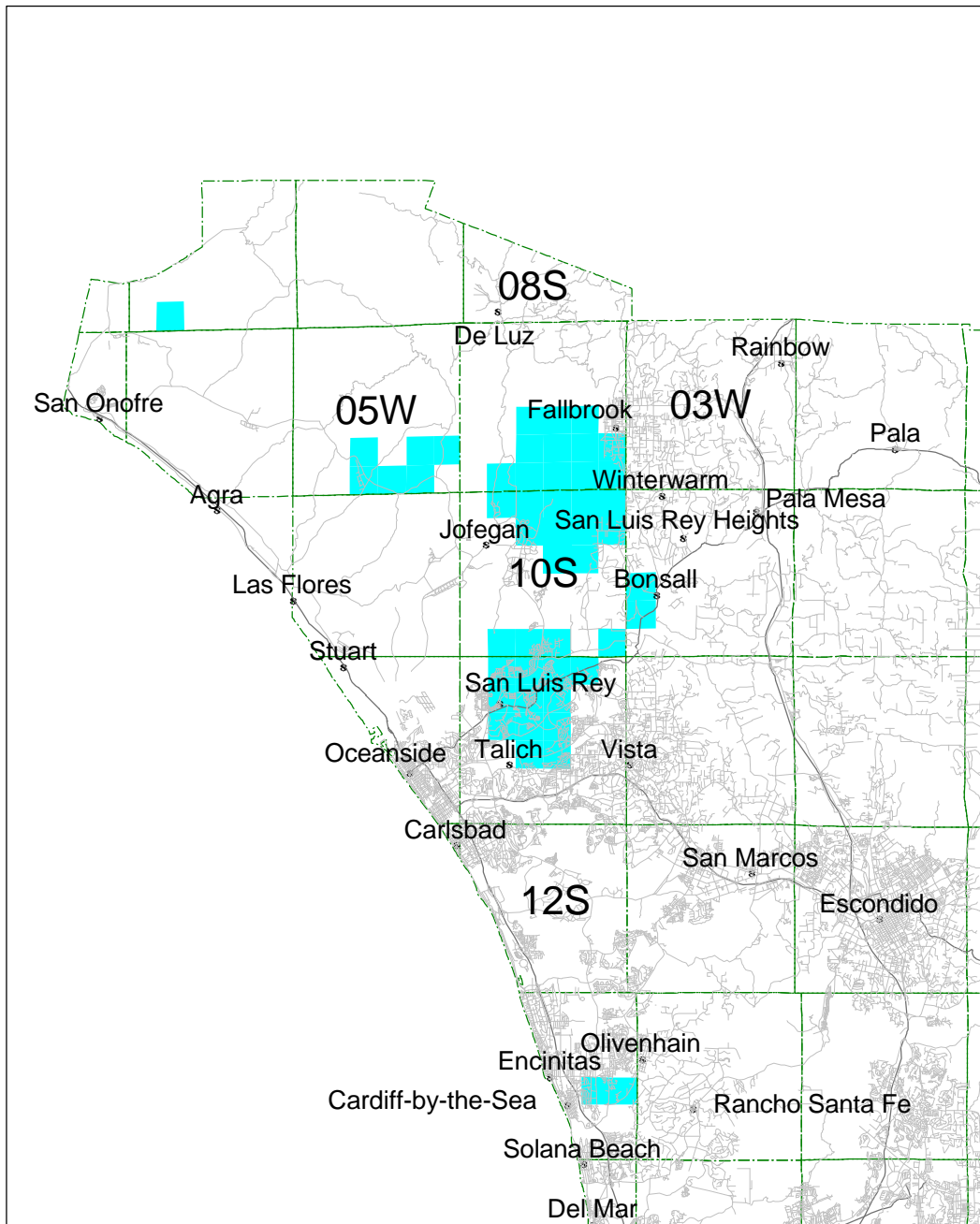
Stephen's Kangaroo Rat

Distribution of Species Addressed in This Bulletin



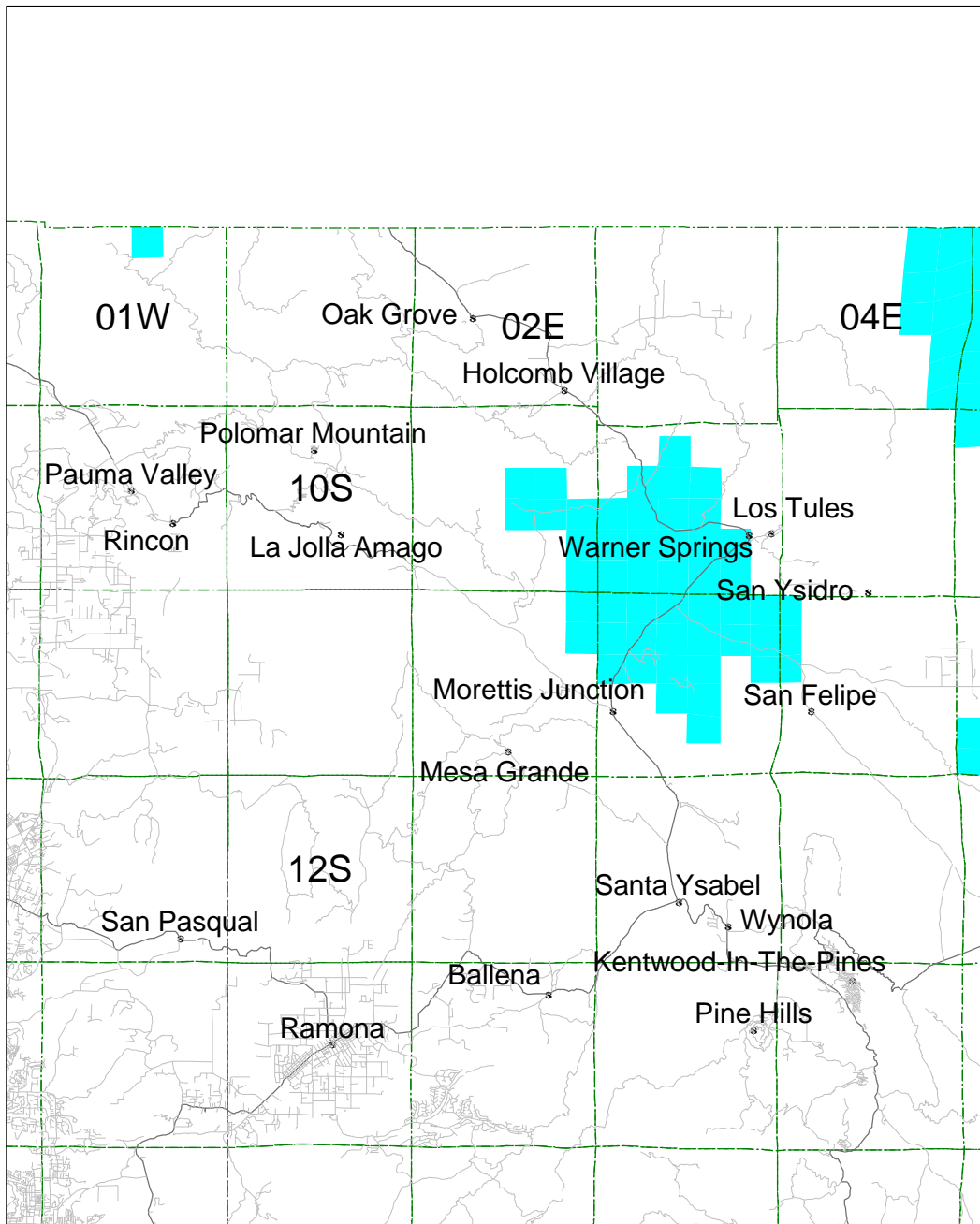
Overview Map

Distribution of Species Addressed in This Bulletin



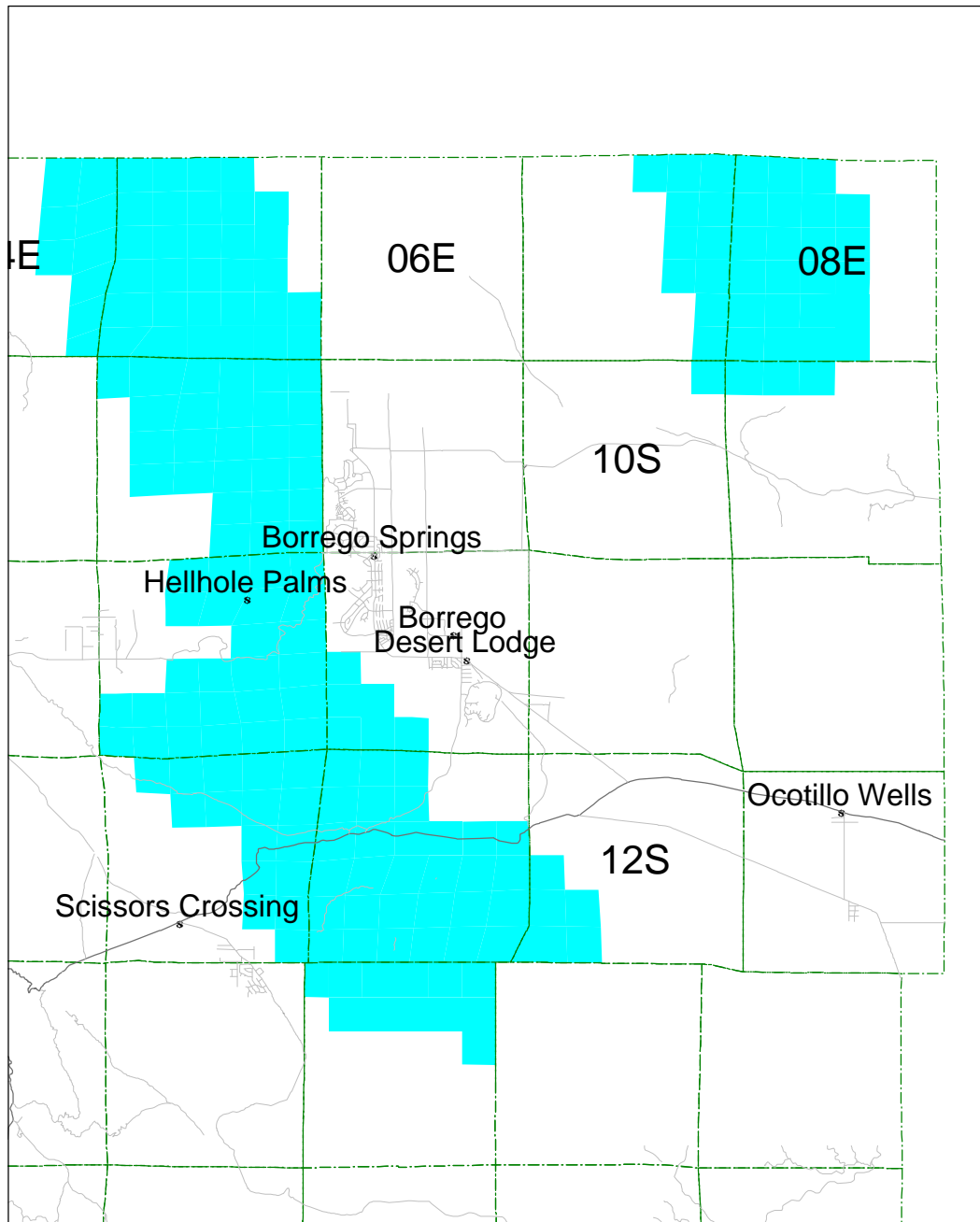
Detail Map A

Distribution of Species Addressed in This Bulletin



Detail Map B

Distribution of Species Addressed in This Bulletin



Detail Map C

Table of Use Limitation Codes

Limitation Codes / Shading Key				
Use limitations apply to the shaded area (■) when any of the following active ingredients are used as above ground grain baits or pelletized rodenticides (left three columns) or burrow fumigants (right column). See the Section List in this bulletin for more detail on species locations.				
	Commensal Rodent Baits (Structural Use)	Field Use Anticoagulant Baits	Field Use Acute Baits	Burrow Fumigants
	Brodifacoum Bromadiolone Bromethalin Chlorophacinone Difenacoum Difethialone Diphacinone Pival Vitamin D3 Warfarin Zinc phosphide	Chlorophacinone Diphacinone	Zinc phosphide	Acrolein Aluminum phosphide Magnesium phosphide Sodium nitrate Potassium nitrate (Smoke cartridge)
Species				
Pacific Pocket Mouse*	33	33	33	5, 33
Stephen's Kangaroo Rat	8	8	8	5
Peninsular Bighorn Sheep*	7	36	36	--

* Species not listed in the 1993 Vertebrate Pesticide Biological Opinion

Table of Limitations on Pesticide Use

Code	Limitation
5	<p>Use shall be supervised by a person (wildlife biologist, county agricultural commissioner, university extension advisor, state or federal official or others) who is trained to distinguish dens and burrows of target species from those of non-target species. Use shall occur only in the <u>active</u> burrows of target species. The person responsible for supervision shall be aware of the conditions at the site of application and be available to direct and control the manner in which applications are made (per Section 6406 of Title 3, California Code of Regulations). Contact your county agricultural commissioner for information on training.</p>
7	<p>Apply only in areas inaccessible to wildlife.</p>
8	<p>Use is prohibited EXCEPT under any ONE of the following conditions (in all cases where toxic baits are applied, any spilled baits shall be immediately removed or buried to prevent exposure to non-target species):</p> <p>For commensal rodent control, outdoor use must be in tamper resistant bait boxes placed in areas inaccessible to wildlife.</p> <p>An approved bait station (see your county agricultural commissioner for approved designs) is used that is fitted with an entrance that provides selective access to pest species but does not allow access to kangaroo rats, OR</p> <p>Bait is placed only in bait stations that are elevated to preclude exposure to kangaroo rats, and designed to prevent spillage by rodents feeding (see your county agricultural commissioner for specifications), OR</p> <p>Baits are placed in bait stations during daylight hours only and are removed (or entrances are closed) by dusk each day, OR</p> <p>Broadcast application of baits is allowed in fields under active cultivation with the maintenance of a 10 yard wide border of untreated crops where fields are adjacent to areas of natural vegetation. For purposes of this provision, fields under active cultivation means fields that have been tilled within the last one year OR that such fields are irrigated by furrow, flood or overlapping sprinkler method.</p>

Table of Limitations on Pesticide Use

Code	Limitation
33	Use is prohibited EXCEPT with a prior site evaluation by the Department of Fish and Game coordinated through the agricultural commissioner.
36	Use is limited to bait stations or below-ground applications.

Section List

The following is an index to Townships, Ranges and Sections where the species addressed in this bulletin are likely to be found. In the Table of Limitations on Pesticide Use, habitat descriptions are included to identify specific land uses where pesticide use limitations do not apply.

Bulletins will be updated every six months. Bulletins are available from the county agricultural commissioner or via the Internet:

(<http://www.cdpr.ca.gov/docs/es/index.htm>).

If a section is suspected to be no longer suitable for a listed species, or if additional sections should be included, please contact the county agricultural commissioner. These lists are maintained for pesticide regulatory purposes only.

Section	Species
San Diego County	
08S01W: S34	Stephen's Kangaroo Rat
08S06W: S32	Stephen's Kangaroo Rat
09S01W: S3	Stephen's Kangaroo Rat
09S04E: S1,2, 11-14, 24-25, 36	Peninsular Bighorn Sheep
09S04W: S21-23, 25-28, 32-36	Stephen's Kangaroo Rat
09S05E: S3-11, 14-23, 25-36	Peninsular Bighorn Sheep
09S05W: S25-26, 28, 33-35	Stephen's Kangaroo Rat
09S07E: S1-3, 11-14, 23-25, 36	Peninsular Bighorn Sheep
09S08E: S4-10, 15-22, 27-34	Peninsular Bighorn Sheep
10S02E: S14-15, 22-25, 36	Stephen's Kangaroo Rat
10S03E: S9, 15-17, 19-22, 26-35	Stephen's Kangaroo Rat
10S03W: S19, 30	Stephen's Kangaroo Rat
10S04W: S1-5, 9-12, 14-15, 32-34, 36	Stephen's Kangaroo Rat
10S05E: S1-6, 8-17, 20-27, 34-36	Peninsular Bighorn Sheep
10S07E: S1	Peninsular Bighorn Sheep
10S08E: S4-6	Peninsular Bighorn Sheep
11S02E: S1, 12	Stephen's Kangaroo Rat
11S03E: S1-13, 15-18, 21-22, 27	Stephen's Kangaroo Rat
11S04E: S6-7, 18	Stephen's Kangaroo Rat
11S04W: S2-5, 8-10, 15-17, 21-22	Stephen's Kangaroo Rat
11S05E: S1-4, 9-14, 21-36	Peninsular Bighorn Sheep
11S06E: S19, 29-33	Peninsular Bighorn Sheep
12S05E: S1-5, 9-14, 23-26, 36	Peninsular Bighorn Sheep

Section

Species

12S06E: S4-9, 13-36	Peninsular Bighorn Sheep
12S07E: S19, 29-32	Peninsular Bighorn Sheep
13S04W: S23-24,	Pacific Pocket Mouse
13S06E: S1-6, 8-13	Peninsular Bighorn Sheep
13S07E: S3-10, 16-18	Peninsular Bighorn Sheep
15S07E: S33-36	Peninsular Bighorn Sheep
16S07E: S1-5, 8-16, 21-28,	
35-36	Peninsular Bighorn Sheep
16S08E: S5-9, 16-21, 29-32	Peninsular Bighorn Sheep
17S07E: S1-2, 11-12	Peninsular Bighorn Sheep
17S08E: S6-7	Peninsular Bighorn Sheep